

# Memorandum:

To: Chief Beaton  
From: Officer Cudmore  
Date: 10-22-02  
Re: Lakeshore Drive Traffic Study

The following report is in regard to the recent traffic study, which was conducted in the area of 113 Lakeshore Drive. The study was done with the assistance of the recently purchased JAMAR Traffic Counting System utilizing the Trax-Pro software package. It is noted the area is a thickly settled residential area with a posted speed limit of 25 miles per hour. It is noted that the actual speed limit for this area is 30 m.p.h. and is classified as a thickly settled area. The roadway is very narrow and the residences are close together without any sidewalks in the entire area. Parking is a constant problem and many residents use the roadway to park vehicles in front of their residences. It is noted the area is adjacent to Rock Pond and many residences were used as summer camps during its original development.

The study began on 10-16-02 at 0100 hours and ended on 10-23-02 at 2300 hours with all results being recorded in the attached reports. All reports attached were able to track not only speed but volume and the axle classification of each vehicle. It is noted the classification of each vehicle is determined by the Federal Highway Safety Administration Standards as they relate to classification one thru classification thirteen (see attached sheet for descriptions).

## Results:

**Volume:** The total volume of vehicles traveled on Lakeshore Drive during the study period totaling 7 days were 5,809 vehicles. The directional breakdown of vehicles traveling east on Lakeshore Drive was 3,194 and vehicles traveling west on Lakeshore Drive was 2,615.

**Speed:** The study as it relates to speed was classified according to a category of five mile per hour intervals and tracked at intervals of every hour. The largest volume of traffic was during the peak hours of 0600 and 1600 hours. In addition to the above, **ninety-five percent** of the traffic traveling in both directions traveled at a speed of **less than 30 miles per hour**. However, this compares to **fifty percent** of the traffic traveling at a speed of **less than 25 miles per hour**. The above results confirm that of the 3,194 vehicles traveling east bound, 418 of those vehicles were exceeding the unposted 30 miles per hour speed limit (13.1%). In comparison, of the 2615 vehicles traveling west bound, 304 vehicles were traveling at a speed greater than the unposted 30 miles per hour speed limit (11.6%).

**Class:** The classification of vehicles traveling on Lakeshore Drive during the study period was classified according to the Federal Highway Safety Administration and were recorded as follows:

	East		West	
• Class One (Motorcycles):	7	0.2%	10	0.4%
• Class Two (Passenger Cars):	2,395	74.4%	1,942	74.3%
• Class Three (Pick-Ups, Etc.):	653	20.4%	528	20.2%
• Class Four (Busses):	5	0.2%	3	0.1%
• Class Five (Six Tire Trucks):	77	2.4%	66	2.5%
• Class Six (Three Axle):	4	0.1%	3	0.1%
• Class Seven (Four Axle, Single Truck):	0	0.0%	2	0.1%
• Class Eight (Two Unit Truck, 4 or less Axle):	11	0.3%	16	0.6%
• Class Nine (5 Axle, Single Truck):	0	0.0%	2	0.1%
• Class Ten (six Axle, Single Truck):	0	0.0%	2	0.1%
• Additional (Class Eleven to Fourteen):	62	1.9%	41	1.6%

Attached you will find the supporting documents for the above findings. They are categorized according to date, time and classification of speed, volume and vehicle type. The data is further separated according to direction of travel as well as the hour in which the information was collected.

**Conclusion:**

An initial review of the above information indicates Lakeshore Drive does not have a severe speed problem as reported in the past. The construction and configuration of the roadway does not accommodate the actual speed limit of 30 m.p.h. and contributes to the perception of speeding motor vehicles. The area is very congested and houses many young families with small children. This factor further complicates the traffic pattern due to the narrow roadway and lack of sidewalks in the area.

The peak volume of traffic is present during the traditional times of the morning and evening commutes. The morning commute peak times were between 0600 and 0700 hours, however the evening commute peak times were not consistent with other areas, averaging between 1500 and 1600 hours. This would indicate that the area appears not to be a major "cut-through" from Andover and West Main Streets during the commuter hours. Formal traffic study requests would require the removal of the "25 m.p.h." speed limit signs and records indicate very few accidents have occurred on Lakeshore Drive. Removal of these signs would only increase the current average speed traveled on Lakeshore Drive.

The above roadway is narrow for the above volume of traffic and is considered congested for a traditional residential area. The roadway pavement itself is in need of some repair in some areas and the continuous winding and turning of the roadway further adds to the congestion. Several blind hills are also present and adds to the difficulty in negotiating this roadway. Enforceability is an issue with the fact there are minimal places to conduct actual radar effectively and the fact remains that less than 13% of the traffic volume was actually exceeding the speed limit.

Respectfully Submitted



Donald C. Cudmore  
Patrolman #10